

1967



# BUICK

*Riviera*

**IMPORTANT  
SAFETY TIPS**

PAGES 2 and 3

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CLASSIC CAR ARCHIVE

## *Congratulations*

## *On Your Choice of a Riviera...*

The 1967 Buick Riviera has many fine and exciting features for your driving enjoyment. This Owner's Manual has been written to briefly describe the proper operation of the features and options available on the 1967 Buick Riviera, as well as to itemize the Guardian Maintenance recommendations so necessary to insure continued satisfaction.

You will recognize many of these features and options as being included on the Buick you purchased. The other available options may prove interesting and desirable for including on your future Buicks. Your Buick dealer has many other accessories available for your purchase that will make your new Buick Riviera even more comfortable and enjoyable. Examine his selection - you may find some especially suited to your individual needs and desires.

All information contained in this booklet is based on the latest product information available at the time of printing. The right is reserved to make changes at any time without notice.

**BUICK MOTOR DIVISION  
GENERAL MOTORS CORPORATION  
FLINT, MICHIGAN 48550**

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CLASSICARCHIVE

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**IMPORTANT  
SAFETY  
TIPS**

**See  
Pages  
2 & 3**

**TO  
HELP  
YOU  
ENJOY THE  
MAXIMUM  
IN  
SATISFACTION  
AND SAFETY!**

# **HIGHWAY SAFETY DEPENDS ON-**

**1 YOU, THE DRIVER**

**2 THE CONDITION OF YOUR VEHICLE**

**3 THE TRAFFIC AND HIGHWAY CONDITIONS**

*... Be Sure You Understand All Three!*

## **SAFE DRIVER CHECKLIST**

- Make safety belts a habit . . . buckle up for safety.
- Adjust seats and mirrors for clear vision and safe handling.
- Check tire pressure regularly.
- Observe weather and road conditions . . . and drive accordingly.
- Be sure you are physically and mentally alert to drive.
- Look around before driving away from where you are parked.

**Safe Drivers Observe All Traffic Laws . . . Make Safe**

# REMEMBER...

*Proper operation, periodic maintenance  
and safety inspections help provide —*

- Economical operation of your vehicle
- Safety for you and your passengers
- Dependable transportation

## HAVE THIS 10-POINT SAFETY INSPECTION PERFORMED ONCE A YEAR \*

- |  |                                     |
|--|-------------------------------------|
| ✓ Brakes                                   | ✓ Exhaust System                    |
| ✓ All Lights                               | ✓ Glass and Mirrors                 |
| ✓ Turn Signals & Hazard<br>Warning Flasher | ✓ Windshield Wipers<br>and Washers  |
| ✓ Steering and Wheel<br>Alignment          | ✓ Windshield Deicer<br>and Defogger |
| ✓ Tires                                    | ✓ Horn                              |

SEE COUPON IN YOUR OWNER PROTECTION PLAN BOOKLET

\* Minimum Requirement - Some States Require More Frequent Inspection

## QUICK REFERENCE INDEX

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## OF IMPORTANT SAFETY INFORMATION

Driving a Habit . . . Get a Safety Inspection Once a Year\*

## WARRANTY

When purchased new, your Buick is covered by the Manufacturer's New Vehicle Warranty and Policy on Buick Owner Service, both of which are contained in your Owner Protection Plan booklet given to you by your Authorized Buick Dealer at the time of delivery.

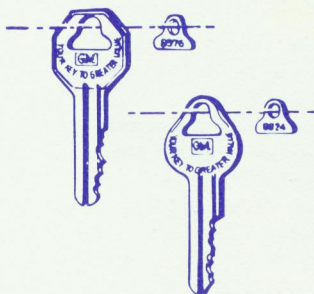
## BREAK-IN PERIOD

The precision manufacture of your new Buick has eliminated need for tedious low speed driving during the break-in period. However, it is advantageous to the life of all close-fitting parts to limit speed to a maximum of 65 miles per hour during the first 100 miles with moderate stopping and starting. After the first 100 miles, speeds may be increased gradually as mileage accumulates, but up to 500 miles avoid driving for extended periods at any one speed. Varying the speed and including some higher speeds within the limits of the law, promotes longer life of parts and better economy of oil and gasoline. Never subject your car to full throttle acceleration or high speed until the engine is thoroughly warm.

## KEYS

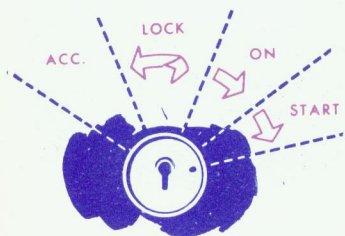
Four keys are provided with your new Buick; two with octagonal heads and two with round heads. The octagonal head keys operate the ignition switch and the door locks. The round head keys operate the glove box lock and the trunk lock.

Before placing a key on your key ring, punch out the small insert bearing the key code number. Keep it in a safe place so if the key is lost a duplicate can be ordered by number from any GM dealer.



## IGNITION SWITCH

The ignition switch has four positions: (1) Accessory, (2) Lock, (3) On, and (4) Start. The key must be in the switch to turn it to any position other than "Lock", and the key can be removed only in the "Lock" position. With the ignition switch in the "Accessory" position the radio or other accessories can be operated without having the ignition on. The ignition switch cannot be turned to the "Accessory" position without first depressing the switch.



## STARTING THE ENGINE

Place control lever in Park.

**Cold Engine** - Depress the accelerator pedal to the floor once and release. This presets the automatic choke and throttle.

**Warm Engine** - Hold the accelerator pedal about one-third of the way down.

Next, crank the engine by turning the ignition switch to the right; release when the engine starts. As soon as the engine is running smoothly, tap the accelerator pedal to slow the engine down to warm-up speed.

### Starting Hints

If the engine should fail to start promptly, check items 1 through 3 below:

1. If the car has been idle for several days, most of the fuel will have evaporated from the carburetor. Pumping the accelerator pedal, while cranking, will pump fuel directly into the engine, and will hasten the start.
2. At low temperatures and slow cranking speeds, one or two pumps of the accelerator pedal, while cranking, will hasten the start. However, excessive pumping will cause flooding. If this should occur, handle as under "flooding".
3. If the engine is warm, but fails to restart promptly, there may be an excess of fuel or "flooding". (This is more likely to occur at low temperatures.)

**FLOODING** - Hold the accelerator pedal to the floor (fully depressed) while cranking the engine; this opens the choke to "unload" any excess fuel. When the engine starts, do not immediately release the accelerator pedal, but hold it down until the engine speed increases.



**HOT STARTING** - Starting a car with a hot engine requires sufficient Energizer (battery) capacity. Make certain your Buick's Energizer is in good condition. If a replacement Energizer is purchased it should have at least the capacity rating of the original equipment unit.

**COLD WEATHER STARTING** - Too heavy an engine oil in cold weather or an out-of-tune engine can cause hard starting. Follow the viscosity recommendations in this manual. Tune-up specifications can be found under "Specifications & Data".

## EXHAUST GAS WARNING

Avoid inhaling exhaust gases when any concentrations of these are present in the air, i.e. in a garage, or when parked for extended periods with the engine running. Exhaust gases may have strong odors which normally should give warning of their presence. However, the exhaust gases from some vehicles may not be noticeable under certain conditions and the senses of people react differently. Exhaust gases contain a percentage of carbon monoxide which is a poisonous gas that, by itself, is tasteless, colorless and odorless.

## Emergency Starting

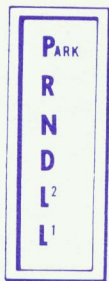
Engines in vehicles with automatic transmissions cannot be started by pushing the car. To start the car when the Energizer is discharged, use an auxiliary battery or Energizer with jumper cables. Be sure to observe correct polarity (positive cable to positive terminal and negative cable to negative terminal) when connecting the auxiliary battery to prevent possible damage to the electrical system.

## SUPER TURBINE TRANSMISSION

On Buicks equipped with steering column shift, the transmission shift control lever must be raised slightly before placing it in PARK, low (L), or Reverse (R).

On Buick Rivas equipped with console shifts, the shift control lever must be depressed to move the lever into these ranges.

The starting motor circuit is so wired that the engine will not start unless the control lever is in either "P" or "N" position.



**PARK** - This position is to be used in conjunction with the foot-operated "Step On" parking brake. THIS POSITION MUST NEVER BE USED WHEN CAR IS IN MOTION. Park is one of only two positions (the other is Neutral) in which your Buick may be started.

**REVERSE** - For backing, bring car to complete stop before shifting into this range.

**NEUTRAL** - This position must be used if towing the car, and can be used when starting the engine.

**DRIVE** - For all normal forward driving. This range allows for the acceleration and cruising adequate for all but the most crucial driving conditions. If additional speed should be required for passing, press the accelerator pedal hard to the floor board. This action will give you instantaneous acceleration when you need it most.

**LOW L² OR L¹** - The L² position may be selected when traveling down a moderate grade where slight braking action is desired without brake application. Return the selector lever to the drive position for resumption of normal driving.

The L¹ position may be selected for maximum braking down severe grades. The transmission selector lever must be placed into Drive range before the transmission will again upshift into direct drive.

**CAUTION:** When stopping or leaving the car unattended, even for a few moments, place the selector lever in "Park" position and fully apply the parking brake.

## Rocking The Car

If it becomes necessary to rock the car to free it from sand, mud or snow, move the selector lever from "D" to "R" in a repeat pattern while simultaneously applying moderate pressure to the accelerator. Do not race engine. Avoid spinning wheels when trying to free the car.

## Towing

If your Buick must be towed, the following precautions must be observed:

The car may be towed safely on its rear wheels with the shift lever in neutral position ("N" if automatic transmission) at speeds of 35 miles per hour or less under most conditions.

However, the drive shaft must be disconnected or the car towed on its front wheels if

- Tow speeds in excess of 35 miles per hour are necessary,
- Car must be towed for extended distances (over 50 miles) or,
- Transmission is not operating properly.

If car is towed on its front wheels, the steering wheel should be secured to keep the front wheels in a straight-ahead position.

## Cold Weather Note

Engine and transmission oils do not flow as freely in cold weather, so after the engine is started, let it idle for a minute or two before starting out. It's much easier on both the engine and transmission.

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## BRAKES

### Power Brakes

Riviera power brakes utilize engine vacuum to reduce the braking effort to much less than is required with regular brakes. A built-in vacuum reserve will supply two or more power assisted brake applications after the engine has stopped. After the vacuum reserve has been exhausted, the vehicle can be stopped utilizing the manual portion of the power system, although considerably more foot pressure will be needed to stop the vehicle.

## Automatic Brake Adjusters

All Buicks are equipped with self-adjusting brakes which eliminate periodic brake adjustments. The self-adjusting mechanism is actuated, as needed, whenever the car is moved in reverse and the brakes are applied. It is possible, however, for excessive brake pedal travel to develop if the required reverse movement with a brake application does not take place during a prolonged period of stop and go forward driving. Should this occur, the car should be driven backward and forward with the brakes applied at the end of each directional movement, until the brake pedal travel is back to normal. If this procedure fails to restore normal pedal travel, or if any abnormally rapid increase in pedal travel is experienced, immediate inspection should be made by your Authorized Buick Dealer. Care should be exercised to assure that full brake pedal travel cannot be obstructed by improper floor mats or other interfering material under the pedal.

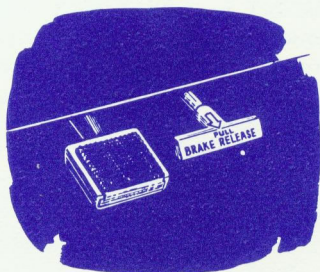
## Inspection Of Brake Lining

Brake linings should be periodically inspected for wear. The frequency of this inspection depends upon driving conditions such as traffic or terrain, and also the driving techniques of individual owners. Your Buick Dealer is best qualified to advise you as to how often this inspection should be performed. When brakes require relining, use Genuine General Motors Parts or equivalent.

## Parking Brake

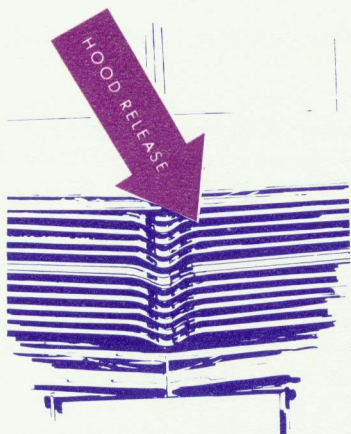
The parking brake is located beneath the instrument panel on the far left side. To engage the parking brake, depress the parking brake foot pedal.

To release the parking brake, pull outward on handle marked "BRAKE RELEASE". Never drive the car with brake engaged.



## Hood Release

Your Riviera hood is front-opening and counterbalanced for easy operation. To open, locate latch in top center grille opening as shown in illustration. Push latch to right and at the same time lift up on hood. To close, push down on hood until latch snaps into locked position.



## Power Steering

Power steering provides ease in handling, parking, and getting into or out of tight places. Power assist is provided by a hydraulic pump driven by the engine. When the engine is not running or if the power steering pump belt breaks, there is no power assist and much greater steering effort is required.

## Door Locks

Any door can be locked from inside by simply depressing the lock button or from the outside by depressing the lock button, then holding the handle push button in while closing the door. When the door lock button is pushed down with the door closed, the door cannot be accidentally opened with the inside handle; to open the door, the lock button must first be raised.

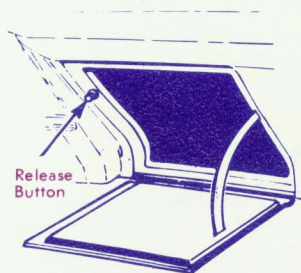
POWER DOOR LOCKS are optional. To lock both doors, simply push the lock control (located on either front door) downward; to unlock doors, push the control upward. The doors can also be locked or unlocked in the conventional manner if desired.

**Buick door lock design contributes to passenger safety and the security of your car and its contents. Always keep the doors locked when driving as well as when leaving the car unattended.**

## Automatic Trunk Release

This option permits opening the trunk from inside the car by merely pushing the release button located behind the glove box door.

**Note of Caution:** Always lock the glove compartment when leaving the car unattended to prevent unauthorized entry into the trunk.

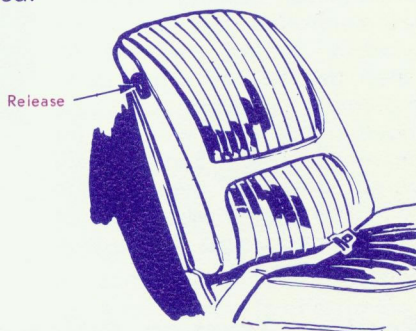


## SEATS

### Manually Adjusted Seats

The front seat can be moved forward or rearward by moving the control lever on the driver's side of the seat forward and exerting slight body pressure in the direction desired. The seat is locked in position when the lever is released.

Optional front reclining passenger seat backs with head rests can be tilted rearward by lifting the lever on the passenger side of the seat cushion and exerting slight body pressure.



### Power Adjusted Seats

Four-way and six-way power seats offer a variety of seat positions through the convenience of electric switches. Move the seat in the direction desired by light finger pressure on the seat switch in the corresponding direction. When the switch is released the seat is locked into position.

**Vary the seat position occasionally while on a long trip. You'll find it not only adds to your comfort, but reduces the fatigue caused by sitting in one position too long.**

## Front Seat Back Lock

For your safety the front seat back is locked into position. To enter the rear seat area, the front seat back lock must first be pressed so the seat back can be tilted forward. This release is located on the side of the front seat back. It will automatically lock in place when returned to its normal position.

## Headrests

Optional headrests can be adjusted to different heights by pulling up or pushing down by hand. Detents provide positive headrest location. Headrests should be adjusted to contact the center of the head when moved straight back. This will minimize the effects of a whiplash should this situation occur.

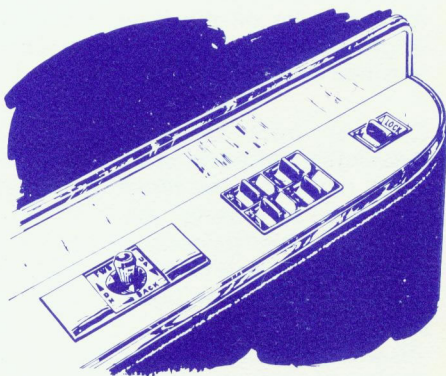
### REMOVAL

Single Bar Type — Raise headrest to full up position; move towards right side of seat, and lift out of seat back.

Dual Bar Type — Raise headrest to full up position; depress retaining springs where bars enter seat back, and lift out headrest.

## Power Windows

All vertical moving windows are controlled by the power window control switches located on the left front door. Individual switches are provided under each window for passenger use. Switches are wired through the ignition switch so that windows cannot be operated unless the ignition switch is "on".



## Positive Traction Differential

The Positive Traction differential is standard on the Riviera G.S., but optional at extra cost on the Riviera. The Positive Traction differential provides additional traction in snow, ice, mud, sand and gravel, particularly when one rear wheel is on a surface providing poor traction. During normal driving and cornering, the Positive Traction unit functions as a standard differential. When one wheel encounters a slippery surface, however, the Positive Traction differential allows the wheel with the greater traction to drive the car.

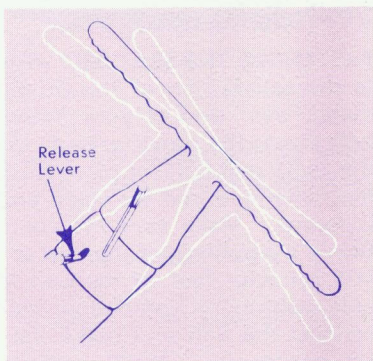
**CAUTION:** On cars equipped with a Positive Traction differential, do not run the engine for any reason with one rear wheel off the ground as the car may drive through the rear wheel remaining on the ground.

## Rear Window Defroster

To insure clear vision through the rear window during inclement weather, the Rear Window Defroster has become established as a popular Buick accessory. This unit draws in air from the passenger compartment and directs it against the back window to remove frost or moisture. Its blower has a two-speed control switch on the instrument panel labeled "Accessory".

## Tilt Steering Wheel

This feature affords the Buick driver ease of entry and exit, and in addition places the steering wheel at the most comfortable and advantageous driving position for his individual size and shape. Pulling the tilt wheel release lever, located on the left side of the steering column, releases the tilt mechanism in the column so that any one of seven positions can be selected.



## Automatic Air Levelizer

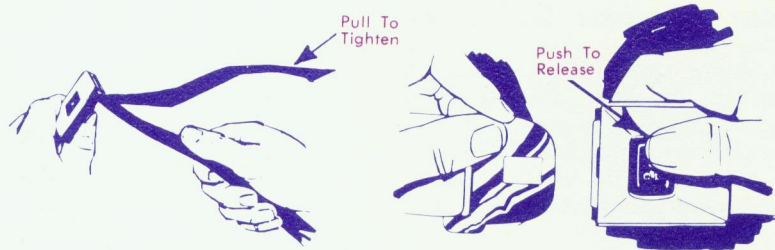
This option automatically maintains the rear standing height of the car at a nearly constant position regardless of load changes. It consists of rear Superlift shock absorbers, air compressor, reservoir tank, height control valve, and a pressure regulator valve. It will be especially appreciated by Buick owners who haul trailers or heavy loads. Because of it, the front end of the car remains level so that steering is normal and headlamp beam position remains as it should. No manipulations or adjustments are required; merely load or unload your Buick and this Automatic Air Levelizer feature will compensate for the change in weight.

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## SAFETY BELTS

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Safety belts provide added security and comfort. Front and rear seat belts, factory installed, are standard equipment on all models. Proper usage and care of these belts will provide added security to driver and passengers in case of sudden, unexpected stops.



## Seat Belts

**FASTENING THE SEAT BELT** - After the front seat has been positioned to the satisfaction of the driver, grasp the buckle end and the flat metal "eye" end of your individual belt assembly and position the belt across the pelvic area as low on the body as possible (never use the same seat belt for more than one person at any given time). Insert the metal eye into the open end of the buckle until an audible snap is heard. Make sure the connection is secure and adjust the belt firmly by pulling on the end of the belt protruding from the buckle. Pull retractor half of the belt to a solid stop to make sure that the belt webbing is completely unwound from the retractor drum, then connect the belt and make the necessary adjustments at the buckle for proper fit. Avoid wearing a seat belt loosely or with slack in the system or with the webbing wound around the retractor drum.

## Shoulder Belts

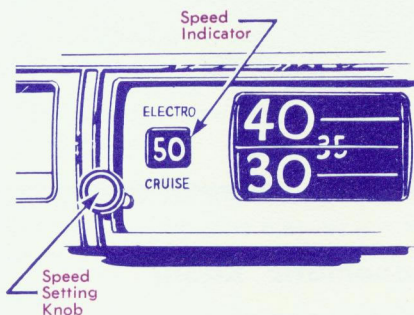
All Buicks are equipped with shoulder belt anchors built into the vehicle. Optional shoulder belts are available for the driver and right front seat passenger. Shoulder belts must always be worn in conjunction with seat belts and are fastened with individual buckles in the same manner as seat belts. Shoulder belts should be tightened only to the point where controls and switches can be easily reached without restriction from the belt. The use of shoulder belts is not recommended for children under 6 years old. Shoulder belts not in use must be anchored by inserting buckle into retainer to prevent buckle end from swinging around.

**RELEASING BELTS** - To release the belts, simply depress the release tab or button located in the center of the buckle.

**CARE OF BELTS** - Keep belts clean and dry. Clean with a mild soap solution and lukewarm water. Keep sharp edges and damaging objects away from belts. Periodically inspect belts, buckles, retractors, and anchors for damage that could materially lessen the effectiveness of the belt installation and repair or replace the questionable parts. Do not bleach or dye belts as this may cause severe loss of strength.

## Electro-Cruise Control

Long distant turnpike driving can be fatiguing since maintaining a steady accelerator foot pressure restricts the driver's body movement. Freedom from this is possible with the optional Buick Electro-Cruise Control. Accurate control of car speed can be maintained between 30 and 90 MPH to coincide with posted speed limits or other driving conditions.



Before engaging the Electro-Cruise, rotate the speed setting knob until the desired speed is indicated in the speed indicator window.

### The Electro-Cruise can be engaged in either of two ways:

1. Accelerate the car up to the set speed, then push in on the knob and release.
2. Push in on the speed setting knob and hold in until the car automatically accelerates up to the set speed, then release the knob.

Regardless of which method is used, the "CRUISE" light will now be on, notifying you that the Cruise control is locked-in and controlling the car speed; it will continue to control the speed until disengaged.

### The Electro-Cruise can be disengaged in either of two ways:

1. Depressing the brake pedal slightly
2. Pulling the speed setting knob rearward.

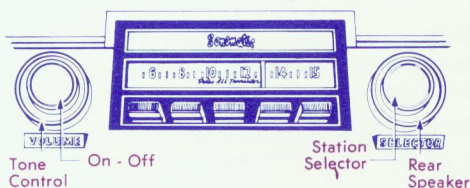
When the Electro-Cruise is engaged and controlling the car speed, you can increase or decrease the speed at any time by simply re-setting the indicator to the new speed desired. Also, if a higher speed is desired momentarily for overtaking another car, etc., the accelerator can be depressed in the normal manner to over-ride the cruise control. When the higher speed is no longer needed, simply take your foot from the accelerator and the cruise control will again maintain the car speed at the speed set on the indicator.

**CAUTION:** Do not use the Electro-Cruise when conditions do not warrant maintaining a constant speed, such as in moderate to heavy traffic, or on winding or slippery roads.

## RADIOS

### Sonomatic Radio

The Sonomatic Radio is an all transistor radio, and is equipped with push-buttons for preselective tuning of five favorite stations.



### PRESELECTING STATIONS

To preselect your five favorite stations, proceed as follows:

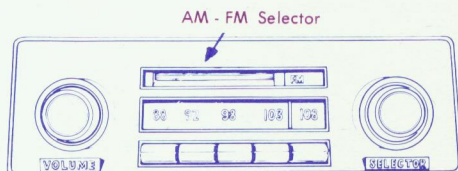
1. Turn on radio.
2. Pull out pushbutton until it stops.
3. Manually tune to desired station.
4. Fully depress pushbutton.

**SUGGESTION** - Arrange preselected stations so that dial proceeds successively from lower to higher frequency stations as the push-buttons are depressed from left to right.

If the program sounds shrill or distorted, a correction can generally be effected by adjusting the tuning knob slightly. Tune set so that the low tones are heard best since low tones are more affected by tuning than high tones.

### AM-FM Radio

This optional radio offers both AM and FM reception. Although FM broadcasting has the advantage of relative freedom from static and a greater fidelity



of tone, reception limitations should be recognized. Reception is normally limited to 25 miles from the stations. Large objects such as hills or buildings can reflect or cancel signals. In fringe areas where FM reception is weak, station sound may flutter or vary up and down, and static from passing cars may be picked up by your FM radio. When this situation is encountered, it is suggested that you retune your radio to a stronger station.

To set the radio for AM or FM reception, move the AM-FM selector bar to either the right or left. The five pushbuttons may be set for either AM or FM stations. See method of preselecting these stations under Sonomatic Radio.

**Best reception will be realized when the antenna is extended to approximately 30 inches.**

## **Rear Seat Speaker**

This accessory allows both front and rear passengers to hear the radio at the same level of volume. It also contributes to a balancing of sound throughout the car, so especially pleasing with FM and Stereo. Turning the right, inner radio knob directs the sound to either front or rear speakers, or a blend of both.

## **AM-FM Stereo Radio**

Many FM stations have all or a portion of their programs in stereo. These broadcasts, simply stated, consist of a two channel pickup of a particular performance. The optional Buick AM-FM Stereo receiver separates these two channels, feeding them to two separate speakers to give life-like realism to the sound.

Operation of the controls is identical to the regular AM-FM radio. Illumination of the "FM" designation identifies the received station as broadcasting in stereo. To balance the two speakers, merely turn the inner, right hand radio knob.

## **Power Antenna Option**

The externally mounted electrically operated antenna is raised or lowered by operating the ANTENNA switch on the instrument panel. For satisfactory radio operation, the antenna should be extended from half-way to the full up position.

## VENTILATION

There are two separate ventilation systems in the Buick Riviera:

**LOWER COWL VENTILATION** - "Vent" pull knobs on the lower ends of the instrument panel introduce outside air through two cowl vents at floor level. This system is not available on Air Conditioner-equipped Rivieras.

**UPPER VENTILATION** - Heater or Heater-Air Conditioner controls are utilized for this system. Outside air enters and is distributed through three outlets in the instrument panel. This air circulates over and around the front and rear passengers, passes under the rear seat, and is exhausted through louvres located below the rear window. The heater and air conditioner blower fan can be used to provide circulation while standing in traffic or whenever desired. For operational information see "Heater and Defroster" or "Heater-Air Conditioner".

## HEATER AND DEFROSTER

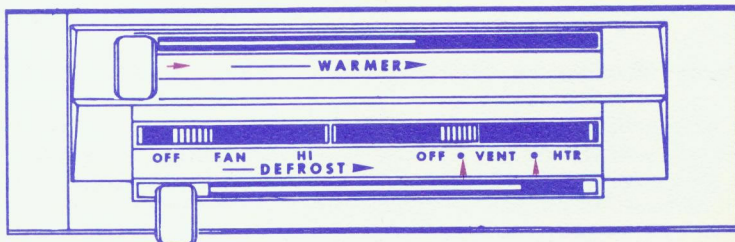
Two levers and two switches control heater, defroster or ventilation.

The upper (warmer) lever regulates the temperature of the air from the instrument panel outlets.

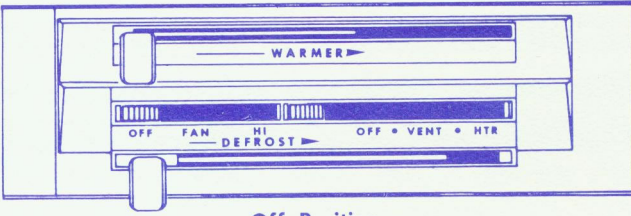
The lower (Defroster) lever directs air flow onto the windshield from the defroster outlets.

The FAN switch turns on the blower to increase air flow through the outlets. This switch has three blower speeds.

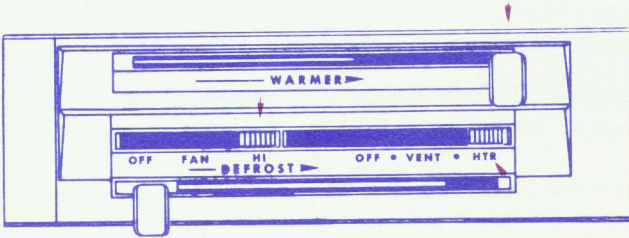
The VENT-HTR. switch is positioned according to the season, for heating or ventilation. There are two VENT positions as indicated by the two dots on each side of the word "Vent". The left position introduces outside air through the instrument panel outlets. The position on the right also directs outside air flow through the instrument panel outlets, and in addition, through the heater floor outlets. With the switch on the right hand dot the air can also be warmed if desired by moving the upper (warmer) lever.



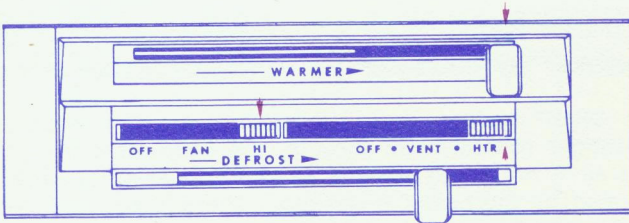
Vent Positions



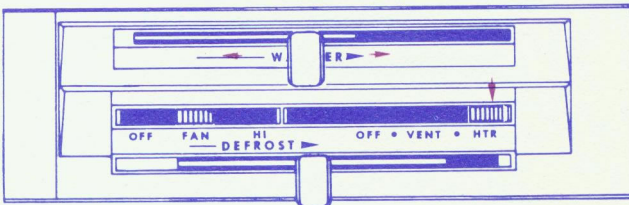
Off Position



Maximum Heat Position



Maximum Defrost Position



Blend Position  
(Both Heat & Defrost)

## HEATER-AIR CONDITIONER

Driving in comfort and arriving fresh and alert is made possible by Buick's combination heater and air conditioner. Two levers and two switches control this option to provide car interior comfort year around.

The upper (Warmer) lever is used whenever interior heat is desired. In the extreme left position the control is off. Temperature is increased as the lever is moved to the right.

The lower (Defroster) lever is moved to the right only when windshield defrosting is desired.

The FAN switch turns on the blower to increase air flow through the outlets. This switch has 4 positions.

The selector (Recir., Norm., Vent, Heat) switch is positioned according to the season; for air conditioning, ventilation or heating.

The RECIR position is for maximum air conditioning. Not only is outside air cooled, but a portion of the already cooled air in the car is recirculated through the air conditioner for additional cooling.

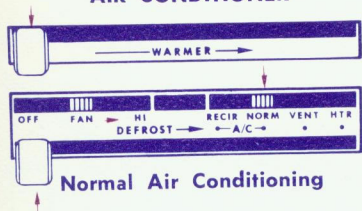
The NORM position is for moderate air conditioning. Only the outside air entering the car is cooled.

The VENT position provides outside air ventilation into the passenger compartment through the instrument panel outlets. This air is not cooled by the air conditioner although it can be warmed by the heater if desired. There is no cowl ventilation on air conditioner-equipped cars.

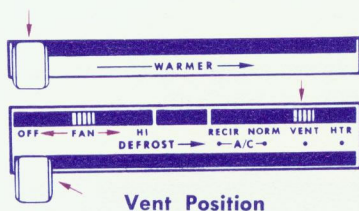
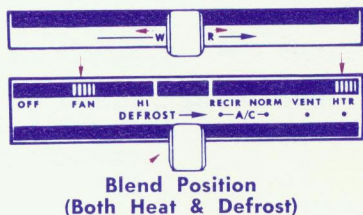
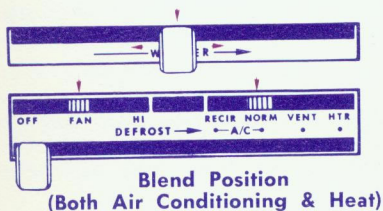
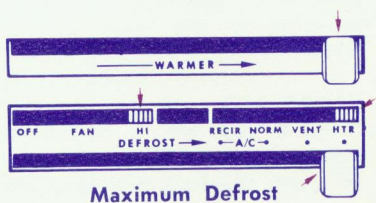
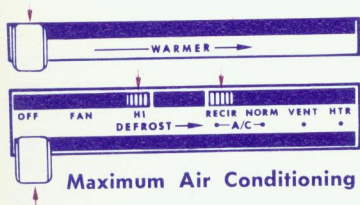
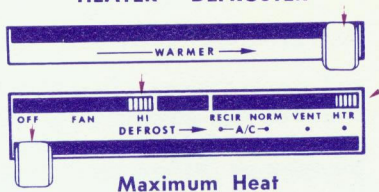
The HEAT position provides for normal heater operation.

The illustrations show the proper positions of the levers and switches for the various heater-air conditioner functions.

## AIR CONDITIONER



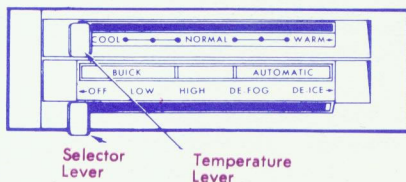
## HEATER - DEFROSTER



## Automatic Climate Control

The Buick Climate Control will warm or cool automatically and yet allow the driver to regulate his comfort preference through the use of two control levers.

**Temperature Lever** - Provides an approximate 65° to 85° F interior temperature range depending on the lever position between COOL and WARM.



**IMPORTANT:** If the initial temperature lever setting does not provide you with a comfortable car temperature, move the lever not over 1/4 inch at a time. Allow several minutes for the system to reach the new temperature setting. Moving the control to one extreme or the other does not speed up the temperature change and only results in over-heating or over-cooling.

**Selector Lever** - Pre-sets the various types of automatic operation:

**LOW Setting** . . . Use during moderate weather or approximately 40° to 70° F outside temperatures. Temperature control is automatic and blower remains on slow speed.

**HIGH Setting** . . . Use for fast warm-up or cool-down. Temperature control is automatic and blower speeds vary accordingly as needed. Air flow may alternate between instrument panel or floor outlets.

**DE-FOG Setting** . Directs air flow to the defroster and floor outlets while maintaining the system on automatic temperature control. The amount of air directed to the windshield is proportionate to the position of the lever between DE-FOG and DE-ICE.

**DE-ICE Setting** . . Directs most of the air to the windshield at high blower speed and operates without delay for engine warm-up.

**NOTE:** When the outside temperature is below 60° F the system will not operate until the engine coolant warms to a temperature of approximately 115° (except in the De-Ice Setting). In warm weather the system will operate as soon as the engine is started.

## Air Conditioner Outlets

Each of the three air conditioner outlets has adjustable vanes. The cool air from the two ball-type outlets can be reduced or shut off completely by pulling outward on the individual shut-off knobs. The center outlet may be shut off by rotating the vanes to the extreme upward position.

## Suggestions For Better Air Conditioning

To obtain maximum cooling from your air conditioner, be certain all windows are closed and the air conditioner outlets are open.

In hot weather, after the car has been parked in the sun with the windows closed, open the windows for a short period to allow the accumulated heated air to be expelled. This will help your air conditioner to cool the car more quickly.

Try this suggestion to increase the comfort of that rear seat passenger riding in the glare of the sun on a very hot day:

Direct the two ball-type air conditioner outlets at the front seat passengers. Direct the center outlet straight rearward in the direction of the rear seat passengers. By carefully pulling the shut off knobs on the ball-type outlets, reduce the air flow to the barest minimum. This will cause the air flow in the center outlet to increase. Thus there is additional cool air directed to the rear seat, but still sufficient cooling for the driver and front seat passenger.

## Care of Your Buick Air Conditioner

It is suggested that the air conditioner be checked by your Buick Dealer every Spring in preparation for the Summer season.

If the car is going to remain in one position for any length of time with the air conditioner operating, transmission shift lever should be in "P" range or "N". This avoids unnecessary load on the engine which may result in overheating under such conditions.

**NOTE:** Your Buick Air Conditioner dehumidifies as it cools. Therefore, don't be alarmed about water dripping from underneath your Buick when your Air Conditioner is in operation or has just been shut off. It is probably coming from the Air Conditioner drain hose.

## TRAILER HAULING

It should be recognized by trailer users that all makes of passenger cars are designed and intended primarily as passenger conveyances. A trailer cannot be towed behind a passenger car without having some effect on safe operation, dependability and economy. Although all Series Buicks will pull a trailer as satisfactorily as other makes of passenger cars, maximum satisfaction and pleasure will be derived through use of proper equipment and avoiding overloads and other abusive operation.

### Trailer Hitches

No special equipment is required, other than an appropriate hitch, for Buick cars to handle a trailer with gross weight less than 1000 pounds in an adequate manner under normal occasional use although tire inflation recommendations outlined in this Manual should be followed. Buick makes light duty trailer hitches available through Buick Dealer Parts and Accessories Departments. For hauling heavy trailers it is recommended that an appropriate load equalizing, frame mounted hitch be purchased from a reliable manufacturer. **Axle type hitches are not recommended for use on a Buick.**

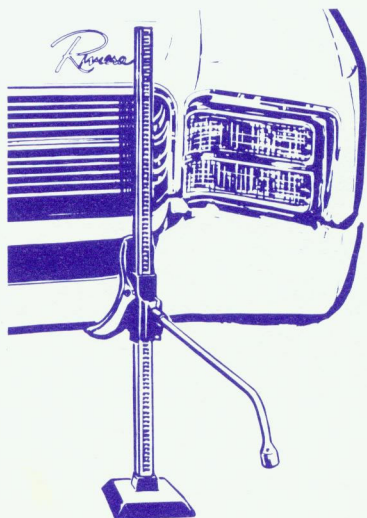
Since many kinds of trailer hitches are sold, it is not practical for Buick Engineering to evaluate and test all hitches. Buick recommends only that the owner should satisfy himself as to the strength of the hitch and the method by which it is attached to the car. Generally, trailer tongue loads should be minimized by maintaining good balance of the load in the trailer.

A more complete discussion of trailer hauling is available in booklet form, and can be obtained by writing to Buick Motor Division, Owner Relations Department, Flint, Michigan 48550.

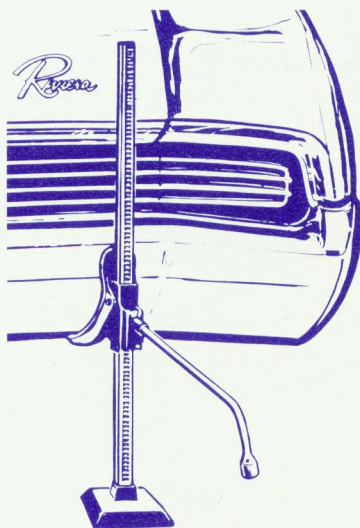
## TIRE CHANGING

The Riviera spare wheel and tire, jack and jack handle are located in the luggage compartment. If it should be necessary to change a tire and wheel, proceed as follows:

1. Set parking brake and place transmission in PARK. Block wheel which is diagonally opposite the one to be changed.
2. Remove the cover, spare wheel, jack and jack handle.
3. Pry off wheel cover using flat end of combination jack handle and wheel nut wrench. Exercise extra care in removing cover to prevent damage to its outer lip.
4. Loosen, but do not remove, wheel nuts.
5. Place jack in "up" position and locate as shown on label affixed to the underside of the trunk lid.
6. Insert jack handle in jack, and raise car off ground. Check stability of car on jack, and then remove wheel nuts and wheel.
7. Install spare wheel and install wheel nuts finger tight.
8. Place small lever on jack in "Down" position and lower wheel until it just touches the ground. Fully tighten wheel nuts, install wheel cover, and remove jack.



Front

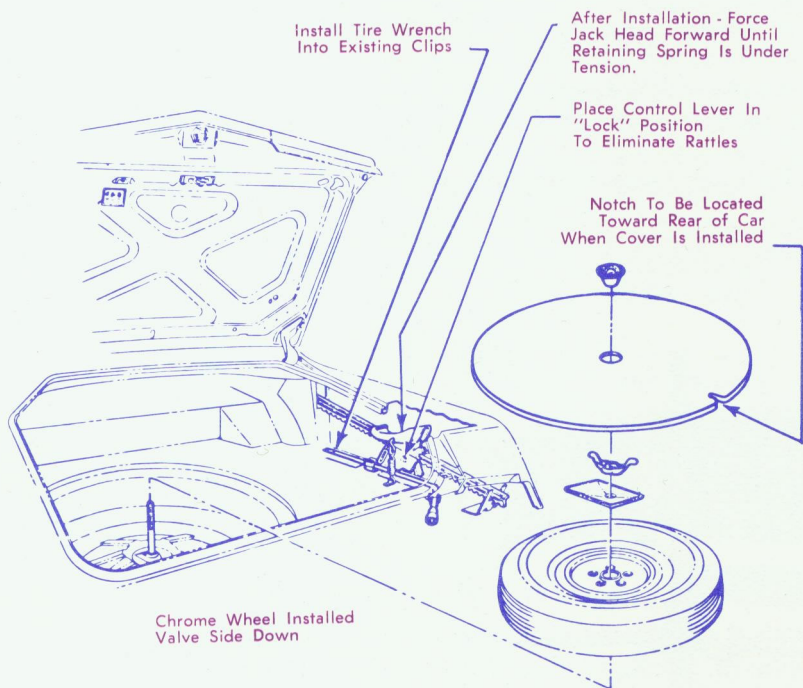


Rear

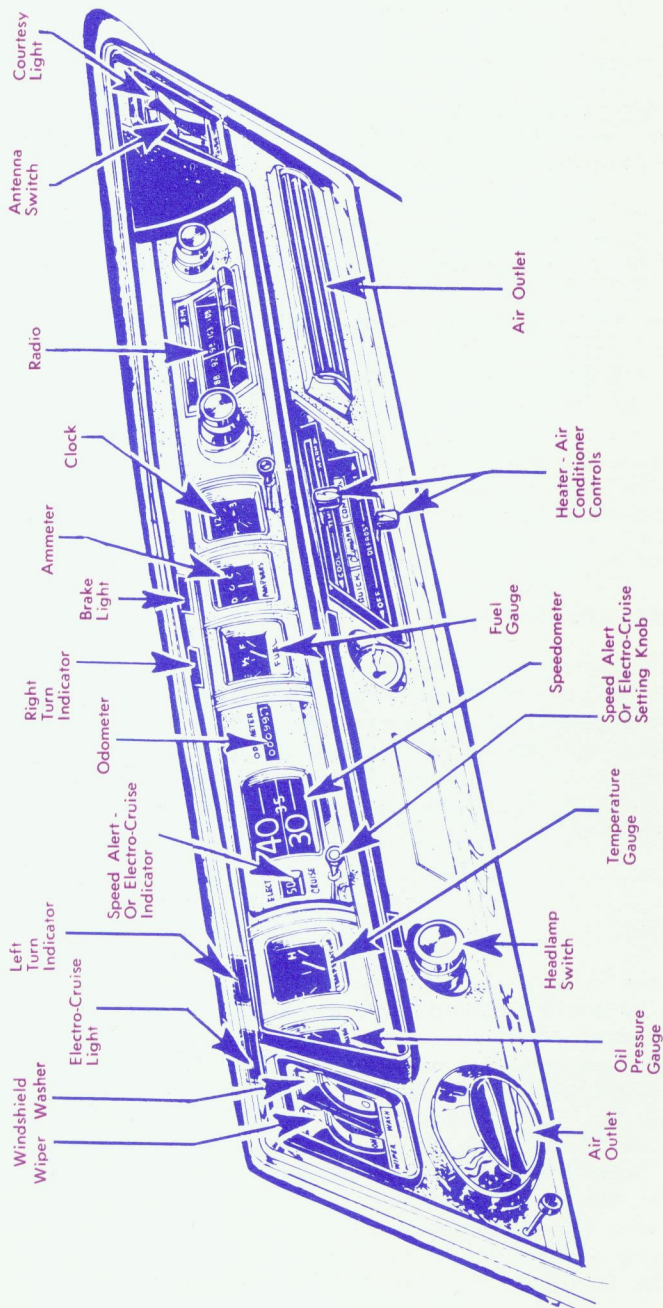
9. Replace jack and wheel in luggage compartment and tighten them securely to avoid rattles.

**CAUTION:** For safety sake, never get beneath the car when it is supported only by the bumper jack. Always use safety stands to support frame if it is necessary to get under car.

**CAUTION:** On cars equipped with a Positive Traction differential, do not run the engine for any reason with one rear wheel off the ground as the car may drive through the rear wheel remaining on the ground.



## JACK AND SPARE TIRE STORAGE



## INSTRUMENT PANEL

## INSTRUMENT PANEL

### Fuel Gauge

The fuel gauge is designed so that it operates only with the ignition switch on; with the ignition off, the pointer may come to rest anywhere between empty and full.

### Water Temperature Gauge

This gauge indicates the temperature of the coolant in the engine. When the engine is cold, the pointer will be at or just below the "C"; if the engine should become too hot, the pointer will rise to the "H". As the engine warms up, the pointer will rise above the "C"; this indicates that the heater can be used effectively and the car speed can be gradually increased. If the pointer ever rises to the "H", the engine should be stopped immediately and the cause of overheating determined.

### Oil Pressure Gauge

This gauge indicates the pressure of the oil in your engine. With the ignition off, the pointer may come to rest anywhere on the dial. When the engine is started, the pointer should rise above the "L" immediately. Sometimes while idling with a hot engine, the pointer may be near the "L"; however, if the pointer ever drops to the "L" while driving, the engine should be stopped immediately and the oil level checked.

### Ammeter

The ammeter indicates the electrical current going into (charging) the Energizer (battery), or coming from (discharging) the Energizer. When there is no current flow, the pointer will be at or near the "0" (zero); this is the normal position when the engine is not running and all accessories are turned off. Immediately after starting the engine, the pointer will move toward the "C" (charge); as the current used by the starter is replaced, the pointer will drop back to just above the "0". Sometimes while idling with many accessories turned on, the pointer will drop toward the "D" (discharge); however, if the ammeter ever shows discharge while driving at highway speeds, the charging system should be checked as soon as possible to prevent the Energizer from becoming discharged.

## Hi Beam and Turn Signal Lights

The headlight high beam indicator is a red light located just below the speedometer. Above the Temperature and Fuel gauges, green turn signal indicator lights flash intermittently to show operation of the right or left turn signals and hazard warning flasher.

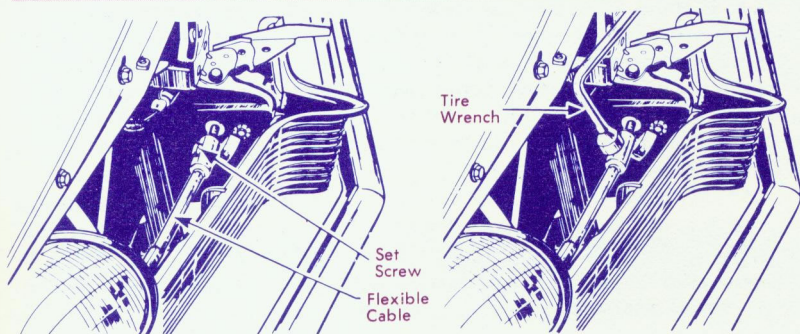
## Headlights

Pulling the headlight switch out to the first notch turns on the parking lights at the front and rear. Pulling the switch all the way out turns off the front parking lights and turns on the head and tail lights. The selection of upper or lower headlight beam is controlled by a foot switch located on the floor near the left foot position. When on upper beam, a small red light glows just below the speedometer.

Rivieras feature headlamps which are hidden above the grille. When turned on they rotate down into the forward position. When turned off (with the ignition switch on), they return to their hidden position. However, if the ignition switch is turned off before the headlamps, the headlamps will remain in the forward position.

In case an electrical failure prevents the headlamps from rotating forward when the lights are turned on, the headlamps can be rotated manually so that the car can be driven until it is convenient to return to the Buick dealer for correction:

1. Open hood and locate two set screws-one in each flexible cable to the headlamps. See illustration.
2. Remove combination jack handle and wheel nut wrench from trunk and loosen both set screws.
3. Rotate headlamps forward and tighten set screws.



## Dome Lights

The rear quarter dome lights turn on automatically when either door is opened; they may also be turned on by turning the headlight switch knob to the extreme left.

## Instrument Panel Lights

The instrument panel lights turn on with either the parking lights or headlights. However, brightness of the instrument panel lights can be controlled by turning the light switch knob to the left for brighter or to the right for dimmer. When the knob is turned to the extreme right, the instrument panel lights will be off.

## Courtesy Light

The courtesy light turns on automatically when either door is opened. It may also be turned on with the LIGHT switch located to the right of the radio.

## Brake Warning Light

If the parking brake is in the applied position, a "Brake" light glows when the ignition switch is turned on. This light warns you to release the parking brake before driving the car.

**The same warning light will go on when the service brake is applied if either the front half or the rear half of the dual brake system loses pressure. This light during brake application warns of any malfunction of either half of the brake system.**

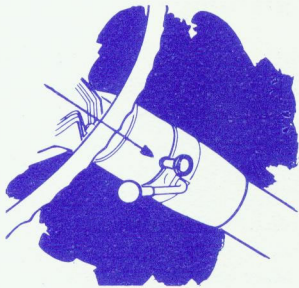
## Turn Signals

The turn signal lever on the left of the steering column is pushed up to indicate a right turn or down to indicate a left turn. A check on the proper functioning of both front and rear turn signal lamps is provided by the flashing of the green indicator lights. If neither indicator bulb lights, check for a blown fuse. If only one indicator bulb lights, check for a burned-out bulb. If one indicator light bulb lights but does not flash, check for a burned-out turn signal bulb on that side of the car.

**A special lane changing feature allows you to operate either the right or left turn signal by holding a slight pressure on the turn signal lever; after changing lanes, simply release the pressure and the turn signal goes off.**

## Hazard Warning Flasher

In the event your car is disabled or you stop for any reason on the highway, this hazard warning system, which flashes all four signal lights, should be used to warn other drivers of your presence. This system is activated by pushing in on the button located just below the steering wheel on the right side of the steering column.



**Since the flashing of all turn signal lights universally means, "this vehicle is not moving", never drive your car with the hazard warning flasher operating. To switch it off, pull out on the operating button.**

## Clock

The electric clock features a sweep second hand and automatic regulation. To reset the time pull the knob out and turn in either direction as required; each time this is done a built-in automatic regulator causes the clock to run slightly faster or slower. If the clock is running fast, turning the hands back to correct the time will automatically make the clock run slower. If the clock is running slow, turning the hands forward will automatically make the clock run faster.

**NOTE:** Since each automatic regulation only amounts to about 30 seconds in a 24-hour period, the hands must be reset a number of times if much correction is required. If the clock loses or gains over 10 minutes in a 24 hour period, it will never regulate sufficiently - the clock should be removed for repair.

## Cigarette Lighter

To operate the cigarette lighter simply press in on the lighter knob. It will stay in until the element is hot, at which time the lighter will automatically release ready for use.

## Windshield Wiper and Washer

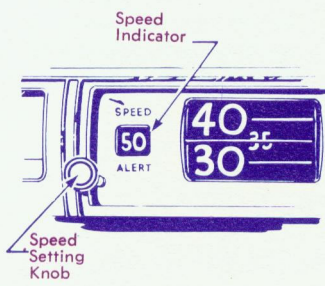
When pushing the switch marked "Wiper", two detents will be felt. The first operates the wiper at slow speed and the second at high speed. When the washer is desired, push in on the washer switch; this will direct a stream of fluid in the path of the wiper blades and will start the wiper at slow speed. As soon as the windshield has been wiped clean and dry, turn off the wiper.



## Speed Alert

To the prudent driver who respects safe and legal driving speeds, but recognizes that he too must be reminded of these occasionally, the Speed Alert, available at extra cost, is a useful accessory.

A buzzer sounds anytime a pre-selected speed is exceeded. Speeds above 30 MPH can be preselected by turning the setting knob and positioning the speed indicator on the desired MPH setting.



Setting the indicator beyond 90 MPH overrides the Speed Alert so that it will be silent regardless of speed. If your Buick has the Electro-Cruise option the Speed Alert is not available.

## FUEL REQUIREMENTS

Your Buick Riviera is designed to operate efficiently on "Premium" grade fuels commonly sold in the United States and Canada.

Use of a fuel which is too low in anti-knock quality will result in "spark knock". Since the anti-knock quality of all premium grade gasolines is not the same and factors such as altitude, terrain and air temperature affect operating efficiency, knocking may result even though you are using the grade of fuel recommended for your engine. If persistent knocking is encountered, it may be necessary to change to a higher grade of gasoline, and, if knocking continues, consult your Authorized Buick dealer.

In any case, continuous or excessive knocking may result in engine damage and constitutes misuse of the engine for which the Buick Motor Division is not responsible under terms of the Manufacturer's New Vehicle Warranty.

## Operation At High Altitudes

If your travels take you to the mountains, don't be concerned if your Buick seems to lose power at fairly high altitudes. Reduced air density causes comparable loss of power. If you operate your car mainly at altitudes over 3500 feet, your Authorized Buick Dealer can, at moderate cost, install an altitude kit in your Buick's carburetor which will provide somewhat better performance at higher altitudes.

## Operation In A Foreign Country

If you plan to operate your Buick outside the continental limits of the United States or Canada, there is a possibility that the best available fuels are so low in anti-knock quality that excessive knocking and serious engine damage may result from their use. To minimize this possibility, write to Buick Motor Division, Owner Relations Department, Flint, Michigan 48550, giving:

1. The compression ratio of your engine. (obtain from your dealer)
2. The Vehicle Identification Number. (obtain from car registration or title)
3. The country or countries in which you plan to travel.

You will be furnished details of adjustments or modifications which should be made to your engine by your Buick Dealer prior to your departure. Failure to make the necessary changes to your car and subsequent operation under conditions of continuous or excessive knocking is considered misuse of the engine for which the Buick Motor Division is not responsible under terms of the Manufacturer's New Vehicle Warranty.

After arriving in a foreign country, contact the nearest Authorized General Motors Dealer for brand names of the best fuels available and advice as to where they may be purchased.

**CAUTION:** Gasoline is extremely flammable and highly explosive under certain conditions. Always stop the engine and do not smoke or allow open flames or sparks near the vehicle when refueling. If gasoline fumes are noticed while driving, the cause should be determined and corrected without delay.

### Recommendations and Change Interval

High quality engine oils are available at your Buick Dealer and at many service stations. It is recommended that you use an oil which, according to the label on the can, is (1) intended for service MS and (2) passes car makers' tests or meets General Motors Standard GM-4745M. Oils conforming to these types contain detergent additives.

#### CHECKING OIL LEVEL

The engine oil should be maintained at proper level. The best time to check it is before operating the engine or as the last step in a fuel stop. This will allow the normal oil accumulation in the engine to drain back in the crankcase. To check the level, remove the oil gauge rod (dip stick), wipe it clean and reinsert it for an accurate reading. The oil gauge rod is marked "Operating Range". The oil level should be maintained in the safety margin, neither going above the "Operating Range" line nor below the "Add 1 Qt." line. Reseat the gauge firmly after taking the reading.

#### VENTILATION FILTER

Remove the crankcase ventilation filter at each oil change (more often under dusty conditions), wash in kerosene, re-oil with SAE 20W oil and reinstall.

#### OIL CHANGE INTERVAL

Change engine oil every 60 days even though less than 1,000 miles have been driven. If more than six thousand miles are driven in a 60-day period, change oil every six thousand miles. This interval applies to the initial change as well as subsequent oil changes. An MS oil, which meets General Motors Standards GM-4745M, was installed in your engine at the factory. It is not necessary to drain this original factory installed oil prior to the recommended normal change period. However, the oil level should be checked more frequently during the break-in period since somewhat higher oil consumption is normal until piston rings become seated.

**Certain driving conditions, such as dust storms and frequent driving on dusty roads, necessitates more frequent oil changes. Your Buick Dealer is qualified to advise you.**

If higher detergency is required to reduce varnish and sludge formation, a thoroughly tested and approved concentrate - - "Buick HD Concentrate" - - is available at your Buick Dealer who is qualified to advise you regarding its use. The use of "break-in" oils, "tune-up" compounds, "friction-reducing" compounds, etc. in your Buick engine are specifically not recommended.

## RECOMMENDED VISCOSITY

The following chart will serve as a guide in selecting the proper oil viscosity. The proper oil viscosity helps assure good cold starting characteristics by reducing frictions, thus increasing cranking speed.

FOR ANTICIPATED LOWEST TEMPERATURES	VISCOSITY NUMBER
Above Freezing (+32°F.)	SAE 10W-30, SAE 20W
Below Freezing (+32°F. and above 0°F.)	SAE 10W-30, SAE 10W
Below 0°F.*	SAE 5W-20, SAE 5W

\*SAE 5W-30 oil may be used at temperatures below freezing.

**NOTE:** When changing the oil during the Fall and Winter seasons, consider the lowest anticipated temperature for the next 60 days.

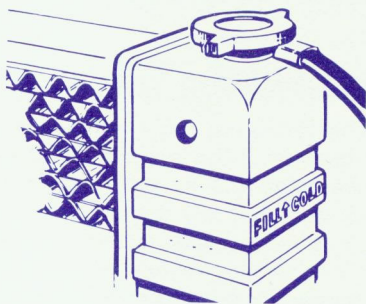
- SAE 5W oil is not recommended for sustained high speed driving.
- SAE 30 oil may be used when the prevailing daylight temperature is above 90°F.

## OIL FILTER REPLACEMENT

The oil filter should be replaced at the engine oil change nearest a 6,000 mile interval or every six months, whichever occurs first.

## COOLING SYSTEM

The cooling system of your Buick is a sealed pressure type which simply means that the coolant boiling point is considerably higher than a system that is not pressurized. Radiator coolant level should be checked when the engine is cold if at all possible. If the radiator cap is removed when the system is at normal operating temperature, the coolant will boil and spurt out due to the release of pressure. If additional coolant is needed, fill radiator in line or above tip of "FILL COLD" arrow.



### Coolant Recommendations

The inhibited year-around (permanent-type) engine coolant, used to fill the cooling system at the factory is a high quality solution that meets General Motors Specification 1899-M. This factory-fill coolant solution is formulated to withstand two full calendar years of normal operation without draining or adding inhibitors, and provides freezing protection to  $-20^{\circ}\text{F}$ .

It is the owner's responsibility to keep the freeze protection at a level commensurate with the area in which the vehicle will be operated. Regardless of climate, system protection should be maintained at least to  $0^{\circ}\text{F}$ ., to provide adequate corrosion protection. When adding solution due to loss of coolant for any reason or in areas where temperatures lower than  $-20^{\circ}\text{F}$ . may occur, a sufficient amount of an ethylene glycol base coolant that meets GM Specification 1899-M should be used.

Every two years the cooling system should be serviced by flushing with plain water, then completely refilling with a fresh solution of water and a high-quality, inhibited (permanent type) glycol base coolant meeting GM Specification 1899-M, and providing freezing protection at least to read  $0^{\circ}\text{F}$ . At this time, also add GM Cooling System Inhibitor and Sealer or equivalent. In addition, Cooling System Inhibitor and Sealer should be added every fall after the car has been driven 24,000 miles. GM Cooling System Inhibitor retards the formation of rust or scale and is compatible with aluminum components.

**NOTE:** Alcohol or methanol base coolants or plain water are not recommended for your Buick at any time.

## Thermostat

The cooling system is protected and controlled by a thermostat installed in the engine water outlet to maintain satisfactory operating temperature of the engine. This thermostat is designed for continuous use through both Winter and Summer and need not be seasonally changed.

## Radiator Cap

The radiator cap is especially designed to pressurize the cooling system and to prevent loss of coolant. It will not open to vent the cooling system until the pressure exceeds approximately 15 pounds per square inch.

**CAUTION:** When the engine is at normal operating temperature or above, the internal pressure built up in the cooling system will blow out scalding fluid and vapors if the radiator cap is removed. To prevent loss of coolant and to avoid the danger of being burned, the coolant level should be checked or coolant added only when the engine is cool. If the cap must be removed when the engine is hot, place a cloth over the cap and rotate the cap slowly counterclockwise to first stop and allow pressure to escape completely. Then turn cap again slowly counterclockwise to remove.

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## TIRES

The factory installed tires on your car are selected to provide the best all around tire performance for all normal operation. When inflated as recommended in the tire inflation pressure table they have the load carrying capacity to operate satisfactorily at all loads up to and including the specified full rated load at all normal highway speeds.

In addition, for those owners who prefer the utmost in comfort, optional tire inflation pressures may be used when loads of five passengers or less are carried.

## Inflation Pressure

To ensure the proper tire inflation pressures for your particular requirements follow the recommendations in the tire inflation pressure table. Keep tire properly inflated, and check inflation pressure periodically. This will ensure you of the best tire life and riding comfort, over the full range of driving conditions.

RECOMMENDED TIRE INFLATION PRESSURES			
Model	Tire Ply	Standard Inflation For All Loads Including Full Rated	Optional Inflation Recommended For Reduced Load
Riviera	4 Ply Rating - 2 Ply	1 to 6 Passengers + 200 lbs. Luggage (1100 lbs. Load)	1 to 5 Passengers (750 lbs. Max.)
		<div>Front</div> <div>24 PSI</div> <div>Rear</div> <div>26 PSI</div>	<div>Front</div> <div>24 PSI</div> <div>Rear</div> <div>24 PSI</div>

## NOTES

1. Tire inflation pressures may increase as much as 6 pounds per square inch when hot.
2. For continuous high speed operation (over 75 MPH) increase tire inflation pressures 4 pounds per square inch over the recommended pressures up to a maximum of 32 pounds per square inch cool for 4 ply rating tires.
3. Cool tire inflation pressure: after vehicle has been inoperative for 3 hours or more, or driven less than one mile. Hot tire inflation pressure: after vehicle has been driven ten miles or more at 60-70 miles per hour.
4. Vehicles with luggage racks do not have a vehicle load limit greater than specified in the tire inflation pressure table.
5. When towing trailers, the allowable passenger and cargo load must be reduced by an amount equal to the trailer tongue load on the trailer hitch.

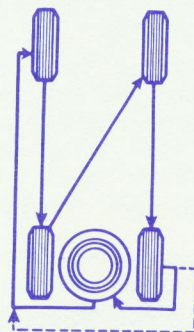
## Tire Sizes and Usage

Model	Tire Size*
Riviera	8.45 x 15
Riviera G.S.	H 70-15

\*All tires listed above are 4 ply rating-2 ply tires

## Tire Rotation Information

To equalize wear it is recommended that the tires be rotated every 6,000 miles as shown in the diagram. Upon rotation, tire pressure must be adjusted (front and rear) in accordance with the recommendations in the tire inflation pressure table.



Solid arrows indicate normal rotation. Dotted lines indicate omission of spare tire rotation should owner prefer.

## CARE OF THE INTERIOR

Dust and dirt that accumulates on the upholstery should be removed every few weeks with a whisk broom or vacuum cleaner. Do not use whisk broom or vacuum on polyurethane headlining - use only soft bristle brush.

Acceptable cleaners for fabric cleaning are available through Buick dealers or other reputable supply outlets. Before attempting to remove spots or stains from upholstery, determine as accurately as possible the nature and age of the spot or stain, and the effect of stain removing agents on the color and its general appearance. For best results, stains should be removed as soon as possible.

### Cleaning Fabrics With Liquid Cleaners

Use very little cleaner, light pressure, and clean cloths. With light pressure and a circular lifting motion, rub stained area starting at the outer edge and working towards the center. Blot dry with clean white blotter. If ring forms, clean entire area of the trim assembly. Some cleaning fluids are toxic so follow precautions on container.

**CAUTION:** When cleaning interior fabrics or carpeting, do not use volatile cleaning solvents such as: acetone, lacquer thinners, carbon tetrachloride, enamel reducers, nail polish removers, or laundry soaps, bleaches and reducing agents.

**NEVER USE GASOLINE OR NAPHTHA FOR ANY CLEANING PURPOSE.**

### Removal of Specific Stains

#### Blood

Wipe with clean cloth moistened with cold water. Use no soap.

#### Candy

Chocolate, use cloth soaked in lukewarm water. Other than chocolate, use very hot water. Dry. Add light application of cleaner if necessary.

#### Chewing Gum

Harden gum with ice cube and scrape off with dull knife. Moisten with cleaning fluid and scrape again.

### **Fruit Stains, Liquor & Wine**

Wipe with cloth soaked in very hot water. If necessary use light application of cleaning fluid. Soap and water not recommended as it might set stain.

### **Grease & Oil**

Scrape off excess with dull knife. Use liquid cleaner application.

### **Ice Cream**

Same as fruit stains.

### **Nausea**

Sponge with clean cloth dipped in clear, cold water. Wash lightly with lukewarm water and mild neutral soap. Rub again with clean cloth and cold water. Finally, if necessary use light cleaning fluid application.

### **Paste or Wax Type Shoe Polish**

Light application of cleaning fluid.

### **Tar**

Remove excess with dull knife, moisten with cleaning fluid, scrape again, rub lightly with additional cleaner.

### **Urine**

Sponge stain with lukewarm soapsuds from mild neutral soap on clean cloth, rinse with cloth soaked in cold water, saturate cloth with one part household ammonia water and 5 parts water, apply for 1 minute, rinse with clean wet cloth.

For more complete information see your Buick Dealer.

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## **CARE OF THE EXTERIOR**

### **Washing**

Dust, dirt and other gritty substances should never be dry-wiped from your Buick's "Magic-Mirror" acrylic finish. Wash your car often to keep it clean. Hot water, harsh detergents, and strong soap should never be used. In areas where salt is spread on icy roads or calcium chloride on dusty roads, wash the car more frequently than usual to prevent damage to the finish. Some owners may prefer adding to the lustre of their car's finish by using Buick Finish Guard Wash and Glaze or equivalent as an additional washing aid.

## Polishing and Waxing

Even though the acrylic paint on your car is more durable than conventional finishes, under certain conditions you may wish to wax or polish your car to provide maximum protection. Calcium chloride and other salts, road oil and tar, tree sap, chemicals from factory chimneys and other foreign matter may damage any known automobile finish if allowed to remain in contact with the paint. Prompt washing may not thoroughly remove these deposits, particularly in areas where these exposure conditions are severe. Properly applied polishes and waxes, such as Buick Finish Guard Cleaner and Glaze, Porcelainize or Buick Finish Guard Hard Plate Wax or equivalent, will provide the best protection for your car.

**NOTE:** Some chemical cleaners used for removing road oil and tars from painted surfaces may be detrimental to acrylic finishes. When purchasing a cleaner, make sure that the contents can be safely used on an acrylic finish.

## Metal Trim

To keep the bright metal trim sparkling like new, it should be washed with clear water, using a mild detergent. If rust or salt corrosion should appear on the chrome parts they may be removed with Buick Rust Eraser or equivalent. Do not use scouring powders, cleaning compounds, or stiff brushes. An application of Buick Chrome Gard or equivalent will offer protection and retard deterioration of chrome plated parts.

## Whitewall Tires

Use mild soap, warm water, and a stiff brush to remove road grime and curb dirt. For severe cases of dirt or grime, it may be necessary to use a fine steel wool. Never use gasoline, kerosene, or any oil product that will discolor or deteriorate rubber.

## Energizer (Battery)

Care of the Energizer is very simple but extremely important.

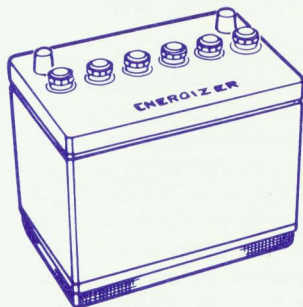
1. Check fluid level often; add colorless, odorless drinking water as required to bring level to split ring at bottom of filler well.

Fluid level can be seen thru Delco eye.

Eye Dark - level correct

Eye Glows - level low

2. Keep Energizer clean. Brush clean with ammonia or baking soda solution; flush off with clean water. Apply petroleum jelly to terminals.
3. If Energizer performance becomes questionable, have your Buick dealer test it.



**CAUTION:** Since normal battery (or Energizer) chemical action generates hydrogen gas which is highly explosive when mixed with air, never expose the battery to an open flame or electric spark. Also, avoid getting battery fluid, which is sulfuric acid solution, on skin, on clothing or other fabrics, or on painted surfaces. Eye protection should be worn while working on the battery for any reason.

## Positive Crankcase Ventilation (P.C.V.)

The Positive Crankcase Ventilation system, which is standard equipment on your vehicle, helps control air pollution caused by crankcase blow-by gases. The P.C.V. system connects the crankcase and intake manifold of the engine and exhaust blow-by gases are returned through this system to the combustion chamber where they are reburned. Periodic inspection and required servicing of your P.C.V. system assures a cleaner, better-performing, longer-lasting engine and almost 100% elimination of any air pollution caused by crankcase blow-by gases. A plugged P.C.V. system can cause condensation of blow-by gases in the crankcase, resulting in the formation of acids, sludge build-up and air dilution. Every 12 months or 12,000 miles, whichever occurs first, the P.C.V. valve should be replaced. Also, all hoses, fittings and the inlet air filter should be inspected, cleaned and replaced, if necessary.

**NOTE:** If the positive crankcase ventilator valve should become clogged, the engine idle will be adversely affected. Therefore, if the engine idle becomes too slow or rough, the ventilator valve should be checked before any carburetor adjustments are made to compensate for the trouble.

## Air Injection Reactor (A.I.R.)

The Air Injection Reactor System is an exhaust emission control system installed on all domestic 1967 GM cars (and some trucks) destined for initial registration in the State of California. This air pollution control system is entirely separate from the Positive Crankcase Ventilation System and is designed to reduce air pollution caused by engine exhaust tailpipe gases by "treating" the unburned hydrocarbons and carbon monoxide as they are expelled from the combustion chamber into the exhaust manifold. A sealed bearing pump, driven by the engine, compresses, distributes and injects clean filtered air at the exhaust port of each cylinder. Here it combines with the unburned hydrocarbons and carbon monoxide at high temperatures in a chemical reaction, producing a "treated" exhaust that is below the maximum allowable level for air pollution from this source. This does not reduce the danger of inhaling any concentration of carbon monoxide in a confined area. See Page 6 for carbon monoxide warning.

The annual engine tune-up recommended for normal engine efficiency, operation, and performance is important for the A.I.R. system's continued effectiveness.

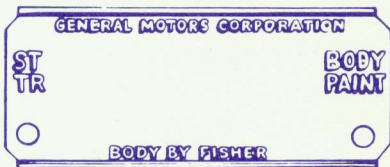
## Extended Vehicle Storage

If you plan to store your Buick over an extended period of time, certain steps should be taken to give it maximum protection. It is recommended that you write Buick Motor Division, Owner Relations Department, Flint, Michigan 48550, for detailed instructions on how to prepare your Buick for storage.

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## IDENTIFICATION NUMBERS

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## Vehicle Identification Number

This is the legal identification number which appears on the body and engine of the vehicle, on the Protect-O-Plate attached to the inside cover of the Owner Protection Plan Booklet, and on the Vehicle Certificates of Title and Registration.

Body Location — Embossed on a plate attached to the left front door hinge pillar, and easily observed when the driver's door is opened.

Engine Location — Stamped on the engine block to be viewed between the rear branches of the right exhaust manifold.

## Engine Production Code Number

This engine number has no legal significance, but identifies the type of engine for factory and dealer use. This number is also stamped on the engine block, and viewed between the front branches of the right exhaust manifold.

## Body Identification Numbers

The body style number, body serial number, trim number, and paint code are shown on a plate affixed to the left side of the cowl and can be seen when the hood is raised.

## — GUARDIAN MAINTENANCE SUGGESTIONS —

Buick Engineers have made certain maintenance recommendations which they feel will help you keep your Buick running at its best. These suggestions are listed on the following pages by recommended time and mileage intervals. Discuss these with your local Buick dealer. He may advise shortening the servicing interval on certain items due to local or individual conditions.

As a convenience to you detachable Maintenance Coupons also listing these recommendations have been placed in the Owner Protection Plan Booklet. These coupons are designed so they may be removed at periodic intervals and presented to your Buick dealer for any necessary maintenance as indicated on the coupons. Charges will be made where applicable.

Let your Buick dealer assist you in obtaining the most satisfaction from your Buick Riviera.



# GUARDIAN MAINTENANCE SCHEDULE

R E C O M M E N D A T I O N S	P E R I O D I - C A L L Y W H I L E R E F U E L I N G	T I M E I N T E R V A L				M I L E A G E I N T E R V A L			
		EVERY 2 MONTHS	EVERY 6 MONTHS	EVERY YEAR	EVERY 2 YEARS	6,000 MILES	12,000 MILES	18,000 MILES	24,000 MILES
ENGINE OIL <sup>1, 3 *</sup>	CHECK LEVEL	CHANGE							
ENGINE OIL FILTER <sup>2, 3 *</sup>			CHANGE			CHANGE	CHANGE	CHANGE	CHANGE
ENGINE OIL FILLER CAP <sup>3</sup>	CHECK					CLEAN	CLEAN	CLEAN	CLEAN
ENGINE MANIFOLD HEAT VALVE <sup>3 *</sup>						LUBE	LUBE	LUBE	LUBE
ENGINE AIR CLEANER ELEMENT							CLEAN	CLEAN	CLEAN
ENGINE BELTS							CHECK	CHECK	CHECK
BATTERY FLUID LEVEL <sup>*</sup>	CHECK								
ENGINE COOLANT	CHECK				REPLACE				
FUEL FILTER							REPLACE	REPLACE	REPLACE
POSITIVE CRANKCASE VENTILATOR <sup>*</sup> VALVE							REPLACE	REPLACE	REPLACE
TUNECARE							PERFORM	PERFORM	PERFORM
TIRES	CHECK PRESSURE					ROTATE	ROTATE	ROTATE	ROTATE
CHASSIS LUBRICATION <sup>2</sup>			LUBE			LUBE	LUBE	LUBE	LUBE
BRAKE SELF-ADJUSTING MECHANISM								INSPECT LUBE	
WINDSHIELD WASHER FLUID	CHECK								

MASTER BRAKE CYLINDER FLUID								CHECK LEVEL	CHECK LEVEL	CHECK LEVEL
AUTOMATIC TRANSMISSION OIL <sup>4, 5 *</sup>								CHECK LEVEL	CHECK LEVEL	CHANGE
POWER STEERING GEAR LUBRICANT <sup>6</sup>								CHECK LEVEL	CHECK LEVEL	CHECK LEVEL
REAR AXLE LUBRICANT <sup>6, 7</sup>								CHECK LEVEL	CHECK LEVEL	CHECK LEVEL
CONSTANT VELOCITY U-JOINTS <sup>*</sup>								LUBE	LUBE	LUBE
PROPELLER SHAFT SLIP SPLINE <sup>*</sup>								LUBE	LUBE	LUBE
BODY RUBBER PARTS & HINGES								LUBE	LUBE	LUBE
AIR CONDITIONER UNITS							FUNCTIONAL CHECK			
ELECTRO-CRUISE FILTER								CLEAN	CLEAN	CLEAN
WHEEL ALIGNMENT & BALANCE								CHECK	CHECK	CHECK

1. Never exceed 6,000 miles between changes.
2. 6,000 miles or 6 months, whichever first occurs.
3. Perform more often when operating where severe dust conditions prevail.
4. Also replace transmission oil filter.
5. When car is subjected to heavy city traffic during hot weather, or in commercial use when engine idles for long periods, perform maintenance at 12,000 miles.
6. Seasonal or periodic change of lubricant unnecessary.
7. Use of incorrect lubricant in Positive Traction Differential can cause chattering on turns.

**\* REQUIRED MAINTENANCE FOR WARRANTY VALIDATION.**

Maintenance interval recommendations listed above should be repeated beyond the 24,000 mile interval and continue throughout the life of the car.

**Remember, Your Buick Dealer Knows Your Buick Best**

## Recommendations for Lubricants & Fluids

<u>Item</u>	<u>Recommendation</u>
Body Rubber Parts	Buick 4-X Compound or suitable silicone lubricant
Brake Master Cylinder	Delco Supreme #11 Hydraulic Brake Fluid or equivalent. Never use reclaimed fluid, mineral oil or fluid inferior to SAE Standard 70-R-3
Brake Mechanism, Self Adjusting	Delco Moraine Special Brake Lubricant or equivalent
Constant Velocity U-Joints	Multi-Purpose Grease, EP No. 1 Grade
Energizer (Battery)	Colorless, odorless, drinking water
Engine Coolant	Mixture of water and permanent Glycol type corrosion and anti-freeze cooling system protection solution conforming to GM Spec. 1899-M
Front Suspension & Steering Linkage	Long-effectiveness lube equivalent to GM Spec. 9985024
Hinges or Pivot Points	Engine oil, Lubriplate, or equivalent
Manifold Heat Valve	Buick Heat Trap Lube or equivalent
Propeller Shaft Slip Spline	Multi-Purpose Grease, EP No. 1 Grade
Rear Axle, Positive Traction	Maintain level with SAE 80 or 90 multi-purpose gear lube meeting specification for GM Part No. 1050081
Rear Axle, Standard	Same as Positive Traction recommendation

Steering Gear, Power	Buick Power Steering Gear Fluid or equivalent.
Transmission, Automatic	Special Buick Transmission Oil or an automatic transmission oil identified by the mark "AQ-ATF" followed by a number and the suffix A (AQ-ATF-XXXX-A)
Windshield Washer	Mixture of water and Buick Windshield Washer Anti-Freeze and Bug Remover or equivalent

## Recommendations for Filters, P.C.V. Valves, Etc.

Item	Recommendation
Engine Oil Filter	AC Type PF-24
Engine Air Cleaner	AC Type A-202C * †
Carburetor Fuel Filter	AC Type GF-427
Positive Crankcase Ventilator Valve	AC Type CV-683C or CV-679C
Automatic Transmission Filter	AC Type PF-160

\* Clean in solvent such as kerosene, squeeze dry, oil lightly.

Periodic replacement unnecessary.

† Riviera G. S. — AC Type A-96C.

Equivalents for the above acceptable if meeting specifications.

## Specifications and Data

### Dimensions

Wheelbase .....	119.0"
Overall Length .....	211.3"
Overall Width .....	79.4"
Overall Height .....	53.2"

Bore .....	4.1875
Stroke .....	3.900
Compression Ratio .....	10.25 to 1
Cubic Inch Displacement ..	430
Horsepower (Taxable) ....	56.11
Horsepower (Brake) .....	360 @ 5000
Torque (lbs. ft.) .....	475 @ 3200
Firing Order .....	1-8-4-3-6-5-7-2
Engine Code No. Prefix ...	MD or ND

### Energizer Specification

Delco Y71 - 3000 watts @ 0° — 70 amp.  
Hrs. @ 20 Hr. Rate

### Capacities

	<u>U.S. Measure</u>	<u>Imperial Measure</u>	<u>Metric Measure</u>
Gasoline Tank (Approx.)	21 Gal.	17.50 Gal.	79.38 Liters
Cooling System			
Less Heater	16 Qts.	13.33 Qts.	15.14 Liters
With Heater	16.7 Qts.	13.92 Qts.	15.80 Liters
With Air Conditioner	17 Qts.	14.17 Qts.	16.09 Liters
Crankcase	4 Qts.	3.33 Qts.	3.79 Liters
With New Oil Filter	5 Qts.	4.17 Qts.	4.73 Liters

### Tune-up Specifications

Belt Tension .....	Consult your dealer
Distributor Point Opening .....	.016"
Distributor Point Dwell .....	30°
Spark Plugs .....	44 TS
Spark Plug Gap .....	.035"
Ignition Timing B.T.C. (Vacuum Advance Disconnected) .....	2½° at idle
Engine Idle (in Drive Range) .....	550 RPM *

\* Add 50 RPM for Air Conditioning and/or Air Injection Reactor.

## FUSES

FUSES AND THE CIRCUITS THEY PROTECT	Ampere Rating	Length in Inches
BACK-UP, DIRECTIONAL SIGNAL and Signal Indicator Lights, Rear Window Defroster	20	1¼
CIGAR LIGHTERS, Dome and Trunk Lights	15	7/8
CIRCUIT BREAKER for Power Windows, Vents, Top and Seat	40	7/8
CLOCK, ANTENNA, Courtesy and Glove Box Lights	15	7/8
CLUSTER Gauges (Oil and Water), Brake Warning Light, Fuel Gauge, Speed Alert Buzzer or Electro-Cruise	6	5/8
HEATER-AIR CONDITIONER Blower and Compressor Clutch	25	1¼
PANEL LIGHTS	4	1¼
RADIO and Dial Light, Power Window Relay	7½	1¼
STOP, HAZARD FLASHER and Indicator Lights	20	1¼
TAIL, License and Cornering Lights, Panel Lights and Rheostat	15	7/8
WIPER and Washer Motor, Transmission Solenoids, Field Relay and Headlight Auxiliary Relay	25	1¼
Headlights and Front Parking Lights - Circuit Breaker in Light Switch	15	

**DO NOT USE**

**FUSES OF HIGHER**

**AMPERAGE**

**RATING THAN**

**THOSE SPECIFIED**

## LIGHT BULBS

Location	Bulb No.	Candlepower
Ash Tray .....	53 .....	1
Auto. Trans. Control Dial (Console) .....	1893 .....	2
Back-up .....	1156 .....	32
Brake Warning .....	194 .....	2
Cornering Lights .....	1195 .....	50
Courtesy Lights, (Console and Rear Seat) .....	90 .....	6
Courtesy Light (Instrument Panel) .....	89 .....	6
Cruise Control Indicator .....	161 .....	2
Glove Box .....	1893 .....	2
Headlight High Beam Indicator .....	194 .....	2
Headlight, 5¾" Dia., Type 1 (Inner) .....	4001 .....	37.5 watts
Headlight, 5¾" Dia., Type 2 (Outer) .....	4002-L .....	37.5-55 watts
Heater, Air Conditioner Control Dial .....	1893 .....	2
Instrument Cluster Dials .....	194 .....	2
License .....	97 .....	4
Radio Dial .....	1892 .....	1
Turn Signal and Parking, Front (Natural Amber)....	1157-NA .....	32-4
Turn Signal, Tail and Stop, Rear .....	1157 .....	32-4
Turn Signal Indicator .....	194 .....	2
Trunk .....	89 .....	6

If difficulty is encountered in replacing a light bulb, consult your Buick dealer.

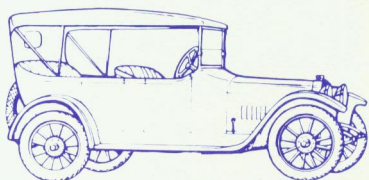
## OWNER OF AN ANTIQUE BUICK?

Although stock of many of the older, past model Buick Service publications have long been depleted, reproductions of these as far back as the 1910 Buick have been made available on 35 mm positive film. All service publications available for a particular model year are included in individual rolls of this film and priced at \$6.00 per roll.

Positive film can be viewed through a film strip viewer, or portions desired may be enlarged and printed by a local photographic studio. This isn't as convenient as the publication itself, of course, but does provide otherwise unobtainable information.

For information on available film reproductions for a particular older model Buick, write to:

GM Photographic Engineering Center  
Microfilm Department  
30001 Van Dyke Avenue  
Warren, Michigan 48090



When ordering make check or money order payable to General Motors Photographic. No C.O.D. Please.

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### 1967 SERVICE MANUALS AVAILABLE

A Service Manual is written primarily for the Service Technician with prior automotive training and equipped with the proper special tools. Although limited in use to the average individual, these publications are available for purchase.

If you wish to purchase one or both of these publications, please send a check or money order for the correct amount since C.O.D. shipments cannot be made.

Tear out this page, include remittance, and send to:

Buick Motor Division, Service Publications Dept., Flint, Michigan 48550

\_\_\_\_\_ 1967 All Series Chassis Service Manual \$6.00

\_\_\_\_\_ 1967 All Series Body Service Manual \$3.00

Chassis Service Manuals include information on engines, transmissions, fuel system, drive line, rear axle, suspension, steering, brakes, electrical, accessories, etc.

Body Service Manuals include information on trim, seats, windows, doors, weatherstrips, convertible tops, body electrical, etc.

Please type or print clearly

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_

Zip Code \_\_\_\_\_

NOTE: Manuals are sent Fourth Class Mail from our warehouse so please allow ample time for delivery.

CLASSIC CAR ARCHIVE



## Remember, your Buick Dealer knows your Buick best.

Your Buick Dealer's Service Technicians receive specialized training at the General Motors Training Centers, are supplied with product bulletins from the factory, and are equipped with the special tools required for adjustments, maintenance and repairs. Your Buick Dealer and his Service personnel can be counted on to give your Buick the best possible service.

Buick dealers are conveniently located throughout the United States. To assist these dealers, Buick Motor Division maintains several Zone Offices in strategic locations. Should your Buick Dealer require assistance in serving you, ask him to contact his nearest Buick Zone Office.

### BUICK ZONE OFFICES

Burlingame, California 94011  
1800 Trousdale Drive  
Van Nuys, California 91409  
14140 Magnolia Boulevard  
Denver, Colorado 80201  
1871 South Bellaire Street  
Box 357  
Jacksonville, Florida 30324  
Room 110  
4019 Woodcock Drive  
Atlanta, Georgia 30324  
1930 Monroe Drive NE  
Box 13594, Station K  
Hillside, Illinois 60162  
4425 Harrison  
Shawnee Mission, Kansas 66202  
P.O. Box 190, 6445 Metcalf Street  
Silver Spring, Maryland 20910  
8605 Cameron Street  
Needham Heights, Mass. 02194  
99 Cabot Street

Detroit, Michigan 48235  
14001 West McNichols Road  
Minneapolis, Minnesota 55422  
5738 Olson Highway  
Clayton, Missouri 63105  
20 South Hanley Road  
Clifton, New Jersey 07011  
1355 Broad Street  
Buffalo, New York 14202  
584 Delaware Avenue  
White Plains, New York 10604  
230 Westchester Avenue  
Charlotte, North Carolina 28201  
1051 East Morehead Street  
Suite 200  
Cincinnati, Ohio 45202  
1217 Federal Reserve Bank Building  
Fourth & Race Streets  
Cleveland, Ohio 44116  
20102 Center Ridge Road

Oklahoma City, Oklahoma 73105  
4040 Lincoln Boulevard  
Portland, Oregon 97205  
915 SW Stark Street  
Fort Washington, Pennsylvania 19034  
514 Pennsylvania Avenue  
Pittsburgh, Pennsylvania 15220  
Two Parkway Center  
875 Greentree Road  
Memphis, Tennessee 38117  
5264 Poplar Ave.  
P.O. Box 17259  
Dallas, Texas 75235  
Suite 921, Frito-Lay Building  
Exchange Park North  
Houston, Texas 77001  
6535 SW Freeway  
Box 183  
Milwaukee, Wisconsin 53222  
10001 West Lisbon Avenue

1380621

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*Remember, Your Buick Dealer  
Knows your Buick Best . . .*

CLASSIC CAR ARCHIVE

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Service Manuals  
Vintage Ads  
and more...***



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